

Serial No. 10/795,944
Reply dated October 29, 2004
Reply to Communication dated September 30, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13. (canceled).

14. (currently amended) A method of treating incoming wastewater, such as raw sewage, effluent and slurry, containing biologically-active cellular units, comprising:

- (a) directing at least a portion of the incoming wastewater to an electroporating station;
- (b) electroporating the at least a portion of the incoming wastewater for destroying at least most of the cellular units contained therein; and
 - said step (b) causing disruption of the cellular units, allowing for the release of matter; and
- (c) directing the released matter to a bioreactor for performing biological digestion thereon whereby the matter is used as food.

15. (currently amended) The method according to claim 14, wherein said step (c) comprises delivering the released matter to at least one of: an aerobic, anoxic, facultative, or anaerobic bioreactor.

16. (currently amended) The method according to claim 14, further comprising, before said step (a):

- (d) transporting the incoming wastewater from a primary treatment apparatus to at least one bioreactor of a secondary treatment apparatus; and

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(e) said step (c) comprising recycling the released matter back to said at least one bioreactor of said step (d).

17. (currently amended) The method according to claim 16, wherein said step (e) comprises delivering the destroyed cellular units of said step (b) to one of: an aerobic, anoxic, facultative, or anaerobic bioreactor.

18. (currently amended) The method according to claim 16, wherein said secondary treatment apparatus further comprises a sludge dewatering apparatus; said step (c) further comprising:

(f) delivering the destroyed cellular units of said step (b) to another bioreactor downstream from said at least one bioreactor and upstream of said sludge dewatering apparatus.

19. (currently amended) The method according to claim 18, wherein said step (c) comprises delivering the destroyed cellular units of said step (b) to one of: an aerobic, anoxic, facultative, or anaerobic bioreactor.

20. (currently amended) The method according to claim 14, further comprising, before said step (a):

(f) transporting the incoming wastewater from a primary treatment apparatus to a secondary treatment apparatus;

said secondary treatment apparatus comprising a sludge dewatering apparatus; said step (c) comprising delivering the destroyed cellular units of said step (b) to a bioreactor upstream of said sludge dewatering apparatus.

21. (currently amended) A method of treating incoming wastewater, such as raw sewage, effluent, slurry, containing biologically-active cellular units, comprising:

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- (a) delivering at least a portion of said incoming wastewater to an electroporation apparatus;
- (b) electroporating said at least a portion of said incoming wastewater in said electroporation apparatus by exposing said at least a portion of said incoming wastewater to a pulsed electric field to disrupt said cellular units and to release matter; and
- (c) delivering said matter to at least one bioreactor for reaction therewith;
said step (c) comprising supplying said matter as food for said at least one bioreactor.

22. (currently amended) The method according to claim 21, wherein said step (c) comprises delivering said matter to at least one of: an aerobic, anoxic, facultative, or anaerobic bioreactor.

23. (currently amended) A method of treating incoming wastewater, such as raw sewage, effluent, slurry, containing biologically-active cellular units, comprising:
- (a) delivering at least a portion of said incoming wastewater to an electroporation apparatus;
 - (b) electroporating said at least a portion of said incoming wastewater in said electroporation apparatus by exposing said at least a portion of said incoming wastewater to a pulsed electric field to disrupt said cellular units and to release organic matter; and
 - (c) supplying said released organic matter as food to a means for biologically digesting organic matter.

24. (currently amended) The method according to claim 23, wherein said step (c) comprises delivering the released organic matter to at least one of: an aerobic, anoxic, facultative, or anaerobic bioreactor.

25. (currently amended) The method according to claim 23, further comprising, before said step (a):

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(d) transporting said incoming wastewater from a primary treatment apparatus to at least one bioreactor of a secondary treatment apparatus; and

(e) said step (c) comprising recycling the released matter back to said at least one bioreactor of said step (d).

26. (currently amended) The method according to claim 25, wherein said step (e) comprises delivering the disrupted cellular units of said step (b) to one of : an aerobic, anoxic, facultative, or anaerobic bioreactor.

27. (previously presented) The method of claim 14, wherein the wastewater includes raw sewage, effluent or slurry.

28. (previously presented) The method of claim 21, wherein the wastewater includes raw sewage, effluent or slurry.

29. (previously presented) The method of claim 23, wherein the wastewater includes raw sewage, effluent or slurry.